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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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60533 TOLER LAW	7590 12/28/2007 GROUP	•	EXAMINER	
8500 BLUFFSTONE COVE			JEAN GILLES, JUDE	
SUITE A201 AUSTIN, TX 78759			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)			
,	10/618,256	CLARK ET AL.			
Office Action Summary	Examiner	Art Unit			
	Jude J. Jean-Gilles	2143			
The MAILING DATE of this communication Period for Reply	appears on the cover sheet with	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by so Any reply received by the Office later than three months after the nearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNIC. R 1.136(a). In no event, however, may a replace. Beriod will apply and will expire SIX (6) MONTI Statute, cause the application to become ABA	ATION.  Note: The state of the communication of the			
Status					
1)⊠ Responsive to communication(s) filed on 0	11 October 2007.				
2a)⊠ This action is <b>FINAL</b> . 2b)□					
3) Since this application is in condition for allo	owance except for formal matte	rs, prosecution as to the merits is			
closed in accordance with the practice und	er Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) 1-30 is/are pending in the application 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-30 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction are	drawn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Exam  10) ☑ The drawing(s) filed on 11 July 2003 is/are:  Applicant may not request that any objection to  Replacement drawing sheet(s) including the co  11) ☐ The oath or declaration is objected to by the	a)⊠ accepted or b)☐ objected the drawing(s) be held in abeyand rrection is required if the drawing(s	e. See 37 CFR 1.85(a). ) is objected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for force a) All b) Some * c) None of:  1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the application from the International Bu * See the attached detailed Office action for a	nents have been received. nents have been received in Ap priority documents have been r reau (PCT Rule 17.2(a)).	plication No eceived in this National Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Su Paper No(s) 5) Notice of Inf 6) Other:	/Mail Date ormal Patent Application			

## **DETAILED ACTION**

This Action is in regards to the Reply received on 10/01/2007.

## Response to Amendment

1. This action is responsive to the application filed on 07/11/2003. There are no amended claims. There are no newly added claims. Claims 1-30 are pending. Claims 1-30 represent a method and apparatus for "MULTI-USER DATABASE SYSTEM AND METHOD FOR RESOURCE USAGE TRACKING". Applicant's arguments with respect to claims 1, 10 and 19 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the existing ground of rejection as explained here below. The dependent claims stand rejected as articulated in the Previous Office Action.

However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention:

A) Applicant contends that the Office action admits that Jones et al. does not disclose an event table to store an event log of the session maintenance transactions, and a session table derives from the event and the accounting table, the session table to store resource usage data associated with at least one user session. Tully does not correct the deficiencies of the primary reference pf Jones and that Tully does not disclose an event table to store an event log of the session maintenance transactions, as set fort in claim 1. Furthermore, Tully does not disclose or teach a session table to

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store resource data associated with at least one user session as set forth in claim 1. In addition Tully does not teach a session table derived from the event table and the accounting table as set forth in claim 1.

- B) Applicants contend that claims 2-9 depend on claim 1 and allowable for the same reason cited in point A.
- C) Applicants argue that independent claim 10-18, and 19-30 are allowable mainly by virtue of the allowability of independent claims 10 and 19. particularly, Applicant contend that the systems of Jones and Tully do not disclose a multi user database system comprising an event table to store an event log of the session maintenance transactions, and a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the transactions

As to point A, it is the position of the Examiner that Jones does not teach in detail all the limitations of claim 1. particularly, Jones appears not to disclose "an event table to store an event log of the session maintenance transactions, and a session table derives from the event and the accounting table". Tully specifically teaches this limitation of the claim. Tully discloses a table (table of figure 6) that is an event table storing event entries associated with game session entries and logs of event results or transactions (see Tully, Par. 0126). The table also maintains and stores transaction information such as average time per event, session status etc. (see also par. 0140). In par. 0132, Tully teaches the accounting table represented by database 700. This table stores accounting data regarding players and the gaming system.

As to point B, claims 2-9 are not allowable by virtue of their dependence on claim 1 as stated in the answer to point A above. Furthermore, the potions of the cited prior art sited for the rejections of these claims are maintains (see rejection of claims 2-9 below). As to point C, the same arguments that sustain the rejection of claims 1 are also valid.

Examiner notes that applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 103(a) rejections applied against the claims, the rejection is therefore sustained.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (hereinafter Jones) U.S. Patent No. 6,804,330 in view of Tully et al (Tully) U.S. Pub. No. 2006/0252490 A1.

**Regarding claim 1:** Jones discloses the invention substantially as claimed. Jones teaches a multi-user database system comprising:

at least one processor (fig. 33, item 604);

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at least one network interface coupled to the at least one processor, the at least one network interface configured to receive transactions from a plurality of users (column 35, lines 15-34; column 39, lines 55-63; note that the inputs are the transactions received fro the users), transactions including session maintenance transactions and data requests (column 35, lines 34-55); an accounting table to store data associated with the data requests (fig. 14, item 218; column 20, lines 50-52); however Jones does not disclose the details of "an event table to store an event log of the session maintenance transactions and a session table derived from the event table and the accounting table, the session table to store resource usage data associated with at least one user session".

In the same field of endeavor, Tully discloses " ... According to another embodiment, all or some of the information in the game session database 600 may instead be stored at the controller 400. The table includes entries identifying game sessions (e.g., a game session associated with a set of event results) that have been played, or are being played, by a player The table also defines fields 602, 604, 606, 608, 610, 612, 614, 616, 618 for each of the entries. The fields specify: a game session identifier 602; a game identifier 604; a total time period 606; an average time per event 608; a time remaining 610; a total wager amount 612; a wager balance amount 614; a cumulative payout amount 616; and a session status 618. The information in the game session database 600 may be created and updated, for example, based on information received from a player device and/or the controller 400 ..." [see Tully; par. 0126].

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Tully's teachings of using both an event table and a session table to store the resource data associated with a user session with the teachings of Jones, for the purpose of improving the ability of a database to store resource usage data in connection with user session and event to increase system's reliability and efficiency. By this rationale, **claim 1** is rejected.

Regarding claim 2: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 3: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 4: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the at least one processor comprises more than one processor in a parallel processing environment (see Jones; column 30, lines 20-39). Regarding claim 5: the combination Jones- Tully discloses the multi-user database system of claim 4, wherein the parallel processing environment is associated with an enterprise data warehouse (see Jones; column 30, lines 20-39).

Regarding claim 6: the combination Jones- Tully discloses the multi-user database system of claim 1, further comprising: a request table derived from the event table and

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the accounting table, the request table to store resource usage data associated with the data requests [see Tully; par. 0126; 0132].

Regarding claim 7: the combination Jones- Tully discloses the multi-user database system of claim 6, wherein the request table is accessible to identify data requests that utilize a selected level of computing resources [see Tully; par. 0126; 0132].

Regarding claim 8: the combination Jones- Tully discloses the multi-user database system of claim 1, wherein the session table is accessible to identify sessions that utilize a selected level of computing resources [see Tully; par. 0126; 0132].

Regarding claim 9: the combination Jones- Tully discloses the multi-user database system of claim, wherein the session table is accessible to identify usage trends for resource utilization forecasting [see Tully; par. 0126; 0132].

Regarding claim 10: the combination Jones- Tully discloses a multi-user database system comprising:

a processor (see Jones; fig. 33, item 604);

a network interface coupled to the processor, the network interface configured to receive transactions from a plurality of users (see Jones; column 35, lines 15-34; column 39, lines 55-63), the transactions including session maintenance transactions and data requests (see Jones; column 35, lines 34-55);

an event table to store an event log of the session maintenance transactions [see Tully; par. 0126; 0132];

an accounting table to store data associated with the data requests(see Jones; fig. 14, item 218; column 20, lines 50-52); and

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a request table derived from the event table and the accounting table, the request table to store resource usage data associated with the transactions [see Tully; par. 0126; 0132].

Regarding claim 11: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 12: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 13: the combination Jones- Tully discloses the multi-user database system of claim 10, wherein the request table is accessible to identify data requests that utilize a selected level of computing resources(see Jones; column 30, lines 20-39).

Regarding claim 14: the combination Jones- Tully discloses the multi-user database system of claim 10, further comprising more than one processor in a parallel processing environment(see Jones; column 30, lines 20-39).

Regarding claim 15: the combination Jones-Tully discloses the multi-user database system of claim 14, wherein the parallel processing environment is associated with an enterprise data warehouse(see Jones; column 30, lines 20-39).

Regarding claim 16: the combination Jones- Tully discloses the multi-user database system of claim 10, further comprising: a session table derived from the event table and the accounting table, the session table to store resource usage data associated with at least one user session [see Tully; par. 0126; 0132; fig. 7].

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Regarding claim 17: the combination Jones- Tully discloses the multi-user database system of claim 16, wherein the session table is accessible to identify high resource utilization sessions [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 18: the combination Jones- Tully discloses the multi-user database system of claim 16, wherein the session table is accessible to identify usage trends for resource utilization forecasting [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 19: the combination Jones- Tully discloses a method of tracking database system usage, the method comprising:

determining a set of new sessions from an event log data table to form a temporary session data table [see Tully; par. 0126; 0132; fig. 7];

matching entries in the temporary sessions data table with a set of request transactions to form a matched data table[see Tully; par. 0126; 0132; fig. 7];

preparing a sessions level summary from the matched data table [see Tully; par. 0126; 0132; fig. 7; fig. 6];

updating a session table, the session table to store resource usage data associated with the set of new sessions; and querying the sessions table to track database system usage [see Jones; column 35, lines 34-55; see Tully; par. 0126; 0132; fig. 7]..

Regarding claim 20: the combination Jones- Tully discloses the method of claim 19, wherein the resource usage data includes CPU usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 21: the combination Jones-Tully discloses the method of claim

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19, wherein the resource usage data includes input/output usage (see Jones; column 39, lines 52-67; column 40; lines 1-41).

Regarding claim 22: the combination Jones- Tully discloses the method of claim 19, further comprising: determining a set of open sessions; and associating the set of open sessions with logoff events stored in the event log data table (see Jones; column 20, lines 18-43).

Regarding claim 23: the combination Jones- Tully discloses the method of claim 19, further comprising: determining a set of open sessions; associating running sessions with open sessions in the set of open sessions; and closing open sessions not associated with running sessions (see Jones; column 30, lines 20-39).

Regarding claim 24: the combination Jones- Tully discloses the method of claim 19, further comprising: preparing a request level summary from the matched data table; updating a request table, the request table to store resource usage data associated with the set of request transactions; and querying the request table to track resource usage [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 25: the combination Jones- Tully discloses the method of claim 24, wherein querying the request table includes providing data associated with resource inefficient transaction requests [see Tully; par. 0126; 0132; fig. 7].

Regarding claim 26: the combination Jones- Tully discloses the method of claim 25, further comprising: modifying the resource inefficient transaction requests whereby database performance is enhanced (see Jones; column 30, lines 20-39).

Regarding claim 27: the combination Jones- Tully discloses the method of claim 19,

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wherein querying the sessions table yields data associated with usage trends (see Jones; column 30, lines 20-39).

Regarding claim 28: the combination Jones- Tully discloses the method of claim 27, further comprising: allocating database resources based on the data associated with usage trends (see Jones; column 30, lines 20-39).

Regarding claim 29: the combination Jones-Tully discloses the method of claim 19, wherein matching entries in the temporary session data table is performed using a user identifier and a session identifier [see Tully; par. 0126; 0132; fig. 7; 0130].

Regarding claim 30: the combination Jones- Tully discloses the method of claim 19, wherein matching entries in the temporary session data table is performed using a user identifier and an account string [see Tully; par. 0126; 0132; fig. 7; 0130].

## Conclusion

4. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914.

The examiner can normally be reached on Monday-Thursday தூத்

from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3201.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

Jude Jean-Gilles

Patent Examiner

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JJG

December 23, 2007